STAGEFRONT

HOME THEATER SOLUTIONS™

INSTALLATION GUIDE

IW650FX ■ IW770FX

PROFESSIONAL QUALITY, IN-WALL, SURROUND EFFECTS LOUDSPEAKERS

ENGINEERED BY NILES®

CONGRATULATIONS!

Thank you for choosing a superior **StageFront Home Theater Solutions™ In-Wall FX** loudspeaker from Niles. With proper installation and operation, you should enjoy years of trouble-free use.

Niles manufactures the industry’s most complete line of custom installation components and accessories for audio/video systems. To see the complete Niles product assortment, visit us on the Internet at: **www.nilesaudio.com**

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INTRODUCTION

StageFront Home Theater Solutions loudspeakers are expressly designed for superior sonic quality in home theater applications. Each model employs advanced technology components that extract the subtle nuances in recorded music or the thunderous action sound in a movie. Models ending in "FX" are intended primarily for special effect placement. Models ending in "LCR" are designed for front channel left/center/right placement or wherever a monopole design is required. StageFront models are the perfect choice wherever quality of sound is the most important consideration.

IW650FX

Stock Number
FG01331

IW770FX

Stock Number
FG01328

FEATURES AND BENEFITS

TCC™ (TALC, CARBON, CERAMIC-FILLED) WOOFER*

**IW650FX only*

Extremely rigid to reduce breakup, lower distortion and provide enhanced bass response

DUAL SIDE-FIRING TCC™ (TALC, CARBON, CERAMIC-FILLED) SURROUND EFFECT DRIVERS*

**IW650FX only*

Provide diffuse sound fields for optimum surround effects

INTERLACED CARBON-FIBER WOOFER WITH BUTYL RUBBER SURROUND*

**IW770FX only*

Provide increased sound pressure levels and sustained high-power output

DUAL SIDE-FIRING CARBON-FIBER MIDRANGES WITH DUAL TETERON™ DOME TWEETERS*

**IW770FX only*

Enable sustained high power playback and diffuse sound fields for optimum surround effects

FORWARD-FIRING FLUID-COOLED TETERON™ DOME TWEETER

Delivers ultra-wide dispersion and silky-smooth response

12V CONTROLLED DIPOLE/BIPOLE RELAY

Accommodates automated DVD-Audio or Dolby® surround sound effects

FRONT-MOUNTED DIPOLE/BIPOLE SWITCH AND EFFECTS LEVEL CONTROL

Enables fine-tuning after installation

CROSS-BRACED PORTED CABINETS WITH INTEGRATED FRAME DESIGN

Fits standard 2x4 construction and is easily retrofitted

EPOXY-COATED MICROPERF™ MAGNETIC GRILLE

Provides an elegant yet unobtrusive appearance

DOLBY DIGITAL® READY

StageFront Home Theater Solutions loudspeakers are expressly designed for superior sonic quality in home theater applications. All models exceed the specifications set forth by Dolby Laboratories for the accurate reproduction of Dolby Digital-Encoded Sources

INSTALLATION CONSIDERATIONS

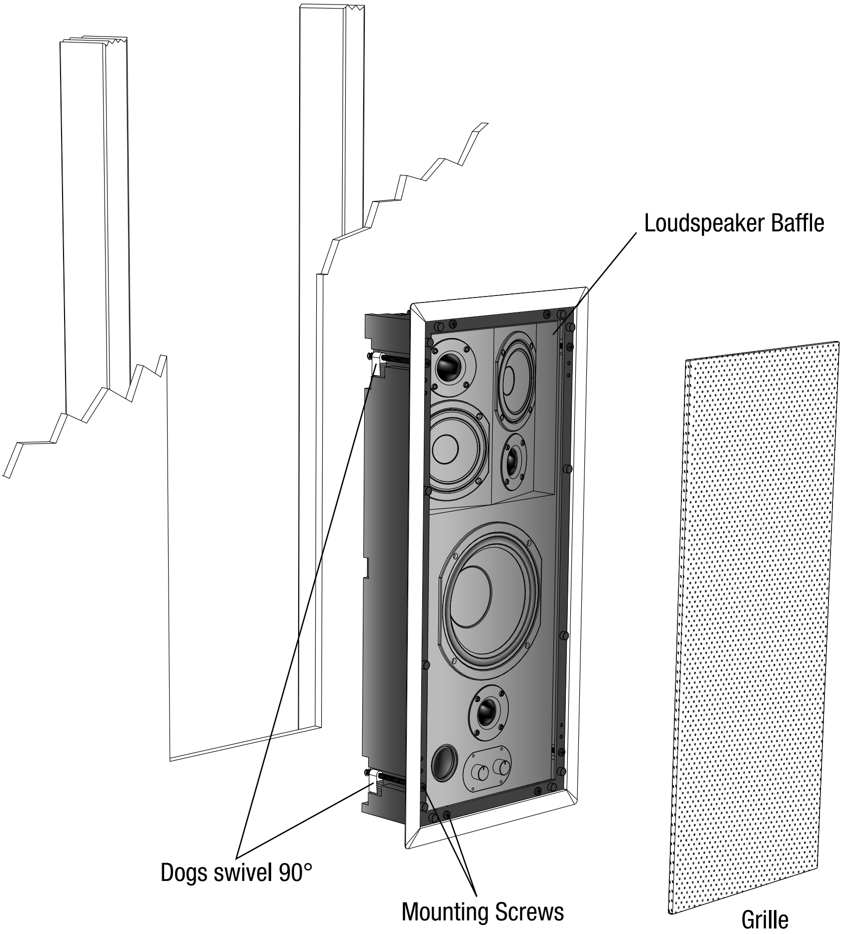

Loudspeaker Baffle
Dogs swivel 90°
Mounting Screws
Grille

Figure 1. Mounting an IW770FX vertically into a wall.

(CONTINUED ON NEXT PAGE)

INSTALLATION CONSIDERATIONS *(CONTINUED)*

TOOLS AND PRECAUTIONS

We recommend using the following tools to install an In-Wall StageFront loudspeaker:

- *Electric drill with 1/4- and 1/2-inch drill bits, and a 1-inch flat drill bit (for drilling through studs)*
- *Keyhole or drywall saw*
- *Stiff wire, fish tape, or glow rods (for routing cables)*
- *Phillips screwdriver set*
- *Cable ties*
- *Pencil*
- *Level*
- *Rubber gloves and protective eyewear*

Before starting the installation, please observe the following precautions:

- *Turn off all system power before making any connections*
- *Always wear protective eyewear when using tools*
- *Make sure hands are clean before installation*
- *Wear gloves when working with fiberglass insulation*

RECOMMENDED AMPLIFIER POWER

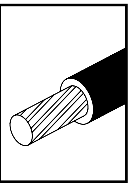
For satisfactory performance, we recommend using a surround amplifier with a power rating of 15 to 125 watts. Most loudspeakers are not damaged by large amplifiers, but rather by small amplifiers. If your system is playing loud music, a small amplifier will run out of power very quickly and can create damaging "clipping" distortions. A more powerful amplifier will play at the same volume without distorting. See **OPERATION** on page **12** for more information about amplifier clipping distortion.

LOUDSPEAKER WIRE

Use 2-conductor loudspeaker wire when connecting loudspeakers to your receiver or amplifier. For most applications, we recommend using 16-gauge wire. For wiring runs longer than 80 feet, we recommend 14-gauge wire. The spring-loaded terminals will accommodate up to 12-gauge wire directly. Larger sizes can be accommodated via pin connectors. When running wire inside walls or ceilings, use special jacketed cable (CL-2 or CL-3) to protect the wire and to meet local electrical and fire codes. In some areas, conduit is also required. For a trouble-free installation, low-voltage wire such as loudspeaker wire must be run in accordance with the National Electrical Code and any applicable provisions of the local building code. If you are unsure of the correct installation techniques, wire jacket, or type of conduit to use, consult a professional audio/video installer, building contractor, or the local building and inspection department.

TECH TIP

Wire size is expressed by its AWG (American Wire Gauge) number – the lower the number, the larger the wire. For example, 12 AWG is physically larger than 14 AWG.



LOUDSPEAKER PLACEMENT

NOTE: THE STAGEFRONT FX LOUDSPEAKERS ARE DESIGNED FOR USE IN EFFECT CHANNEL APPLICATIONS. FOR FRONT LEFT, CENTER OR RIGHT-CHANNEL NEEDS, WE RECOMMEND USING STAGEFRONT LCR LOUDSPEAKERS.

PLACING THE STAGEFRONT FX AS THE SIDE LEFT AND RIGHT LOUDSPEAKERS

In home theater, the goal is to reproduce the experience of a great movie theater in your home. The biggest difference between the two venues is the use of a rear- or surround-loudspeaker array in a commercial theater. Here, it is not uncommon to see 20 or 30 loudspeakers placed around theater walls. This huge array of loudspeakers assures the audience will feel completely surrounded by the ambient soundtrack of the movie.

Filmmakers carefully use the “surround” soundtrack to envelope viewers in the sound environment on screen. They will place background music, rain sounds, traffic noise, etc. on the “surround” soundtrack to create desired effects. However, in a home with a single pair of front loudspeakers, this surround effect will be lost, and jungle sounds may actually sound like they are emanating “from the middle of your head,” just like headphones!

Each StageFront FX loudspeaker is equipped with a BIPOLE/DIPOLE front switch as well as a 12 volt trigger jack on the rear of the enclosure. This jack will switch the StageFront FX loudspeaker from the front switch setting to its opposite position (such as from a setting of Dipole to Bipole) for as long as voltage is applied to this connection. Tip is positive. Use a source that will supply 12 volts DC 200 mA minimum for this trigger. These controls optimize the surround effects for either side or rear placement as well as various surround modes. (see **SETTING THE BIPOLE/DIPOLE MODE** on page **11**). Here are some recommended loudspeaker placement tips:

(CONTINUED ON NEXT PAGE)

- *Place the surround loudspeakers on a rear wall directly behind the listening position. If possible, try placing the loudspeakers nearer to the corners, as shown in* ***Figure 2*** *and* ***3****. Set each BIPOLE/DIPOLE switch to DIPOLE for reflected sound. Moreover, the adjoining walls will act as powerful reflectors to create even more reflections.*

- *If you place the surround loudspeakers farther away from the listener, the surround sound will dissipate, requiring even more power from the surround-sound channels. If your sound system uses a small (less than 50 watts per channel) surround amplifier for the rear loudspeakers, be sure to place the loudspeakers within 5 to 8 feet of the listening location.*

- *If you are using a larger (more than 50 watts per channel) surround amplifier, you can mount the loudspeakers 10 to 15 feet away from the listening location and still achieve reasonably high volume levels. In large or unusually-shaped rooms, this might be the only way to achieve a good effect.*

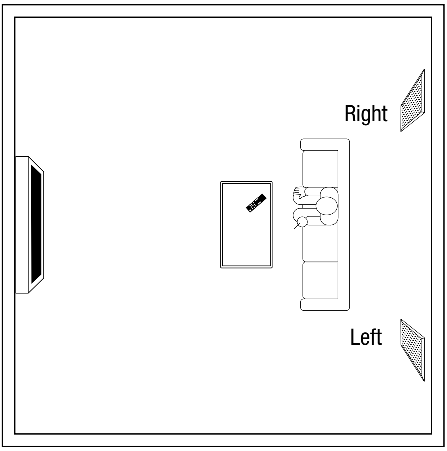


Figure 2. Loudspeakers are placed near back corner walls of a home theater room.

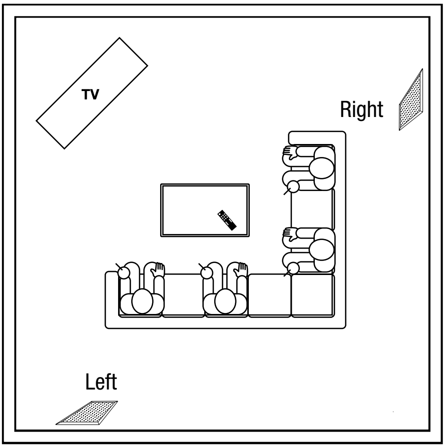


Figure 3. Loudspeakers are placed near back corner walls of a home theater room with an L-shaped sofa.

- *If your home theater system is capable of reproducing Dolby Surround EX® consider using a second pair of StageFront FX loudspeakers (on the side walls) for an additional rear surround effect, as shown in* ***Figure 4****. Ideally, the side loudspeakers should be placed in-line with the listening position with the BIPOLE/DIPOLE controls set to DIPOLE. For a more focused surround effect, set the BIPOLE/DIPOLE controls to BIPOLE.*

- *If you like listening to music in surround modes (which emulate concert hall acoustics), consider using more than two surround loudspeakers to provide an extraordinary effect. With StageFront loudspeakers, it is easy to add another pair without affecting the decor of the room.*

If the StageFront FX loudspeaker is being installed in existing construction, please use the included cardboard template to mark your installation location. Check for proper clearance within studs or any other obstructions before cutting the speaker opening. **If you are unsure of the correct installation techniques, please consult your authorized Niles Audio dealer.**

NOTE: FOR THIS APPLICATION, YOU WILL NEED TO USE A MORE POWERFUL AMPLIFIER THAN THE ONE BUILT INTO A TYPICAL SURROUND-SOUND RECEIVER OR AMPLIFIER. NILES MAKES A NUMBER OF SYSTEMS INTEGRATION AMPLIFIERS WITH PROPRIETARY FEATURES THAT MAKE THEM UNIQUELY SUITED TO ENHANCE YOUR EXISTING SURROUND-SOUND SYSTEM. CONSULT YOUR LOCAL NILES DEALER FOR MORE INFORMATION.

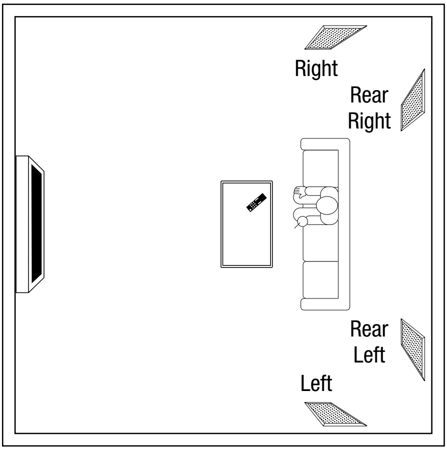


Figure 4. Two pairs of loudspeakers reproduce Dolby Surround EX® surround sound in a home theater room.

THE BOUNDARY EFFECT

Placing a loudspeaker in a corner can powerfully affect the way a listener perceives bass response. Known as the boundary effect, placing loudspeakers close to a wall/ceiling boundary or near a corner-wall boundary will emphasize certain bass frequencies, while canceling others. This effect can make the loudspeaker sound excessively boomy and inaccurate to some listeners, while to others it just seems like more bass sound. As a good rule-of-thumb, if you like listening to your current pair of loudspeakers with the bass turned up, you'll enjoy corner placement. However, if you listen with the tone controls at neutral, try keeping the loudspeakers at least 2 or 3 feet from the boundaries of the room.

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FINISHING THE INSTALLATION

CONNECTING & INSTALLING THE LOUDSPEAKER

1. *Please be sure to install the correct loudspeaker in the correct room position. Look on the rear label for "Right" or "Left" designation. Install in the appropriate position as viewed from the listening position facing the video display.*

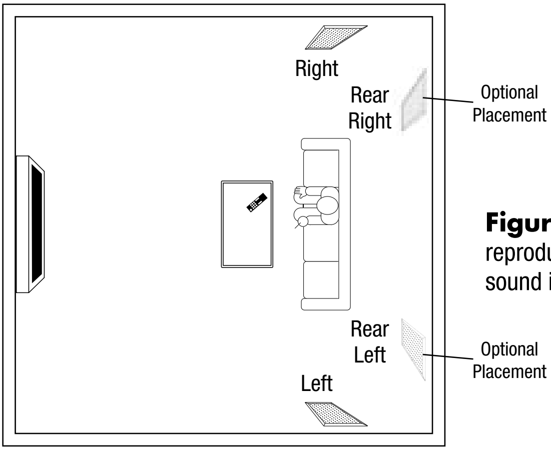

Figure 5. Two pairs of loudspeakers reproduce Dolby Surround EX® surround sound in a home theater room.

2. *Remove the magnetic grille starting at a corner and gently pulling the grille outwards as you work around the edges.*

3. *At each loudspeaker, route the loudspeaker and optional trigger wire through the provided channel to the input connectors, then separate the loudspeaker wire so that at least 2 inches of each conductor are free. Strip away 1/4 inch of insulation from each loudspeaker wire. If you wish to use the 12 volt triggered Dipole/Bipole automated feature, please insert 1/8" (3.5mm) plug above speaker inputs. Refer back to page 5 for details.*

4. *On each set of loudspeaker connectors, press down the spring-loaded connector, insert the appropriate conductor, and then release the connector, as shown in* ***Figure 5****. Gently tug on the loudspeaker wire to make sure it is held in place. If not, repeat this procedure until it is.*

   NOTE: OBSERVE CORRECT POLARITY: POSITIVE (+) GOES TO THE RED POST AND NEGATIVE (–) GOES TO THE BLACK POST. IF YOU ARE UNSURE OF WIRE POLARITY, SEE THE SECTION, **CHECKING LOUDSPEAKER PHASE** ON PAGE **9**.

5. *Connect the other end of each loudspeaker wire to the receiver (or amplifier) in the same way.*

6. *Check that loudspeaker is level and then tighten the eight large screws using a #2 Phillips bit. This should pull the frame and mounting dog together (sandwiching the drywall) so that the frame is absolutely flush with the wall surface. There should be no gaps between the wall and the frame.*

7. *Remove cardboard paint mask / template from the box and keep for future potential use.*
8. *Turn on the home theater receiver and calibrate all loudspeakers in the system according to the receiver manufacturer's instructions.*

IMPORTANT: DO NOT OVER TIGHTEN THE SCREWS! OVER TIGHTENING THEM MAY MAKE THE GRILLE DIFFICULT TO INSTALL.

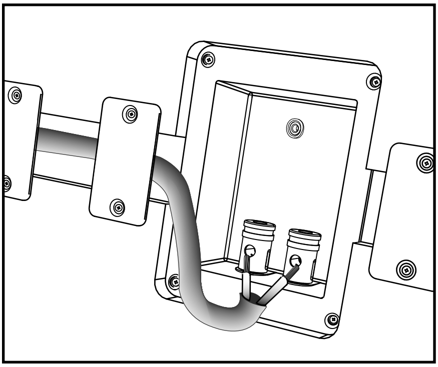

Figure 6. Connecting a loudspeaker wire to the terminals.

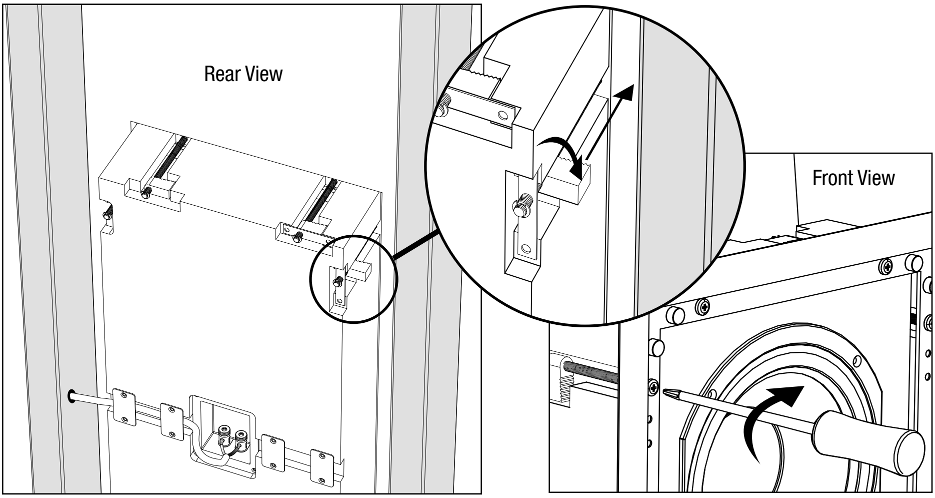

Figure 7. Installing unit into a wall.

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PAINTING THE GRILLE AND FRAME

Each StageFront FX and LCR frame and grille may be painted without the need for primer. For best results, use a spray gun or airless sprayer, thin the paint to prevent clogging of the grille holes, and apply several light coats instead of one heavy one.

1. *Install loudspeaker into wall.*
2. *Carefully peel adhesive-covering strips off of paint mask and align over magnets on loudspeaker baffle. Gently press into place.*
3. *Paint the frame of the loudspeaker.*
4. *Paint the grille separately from the loudspeaker frame.*
5. *Reinstall grille after paint dries on all surfaces and the paint mask has been removed.*

CHECKING LOUDSPEAKER PHASE

Loudspeaker wire has two conductors. On both your loudspeaker and amplifier, one conductor is attached to the negative (–) terminals, while the other is attached to the positive (+) terminals. Usually, the wire is marked for your convenience, but the marking can be done in the following different ways:

- *Stripe on one wire*
- *Ribbed area you can feel on one conductor*
- *Different colors of metal wire on each conductor*
- *Fabric strand or string wound into one of the conductors*

Of course, there are some wires that appear completely identical. So be careful, or you might make a connection mistake. If you do, one loudspeaker will be playing “out-of-phase” with the other loudspeaker. A pair of out-of-phase loudspeakers works against each other, and the sound of the two playing together will be lacking in bass and sound “phasey.” If you suspect the sound is not right, and you cannot see any markings on the wire, try this simple test:

1. *Stand halfway between the loudspeakers.*
2. *Play some music with the amplifier or radio set to Mono.*
3. *Listen to the richness of the bass and the loudness of the sound.*
4. *Turn off the amplifier and reverse the connections on one amplifier channel only.*
5. *Repeat the listening test with the same volume control setting. When the sound has a richer bass and is slightly louder, the loudspeakers are working together or “in-phase.”*

SETTING THE BIPOLE/DIPOLE MODE

Each StageFront FX loudspeaker features a BIPOLE/DIPOLE switch located on the front, as shown in **Figure 8**. Set the BIPOLE/DIPOLE switch on each StageFront FX loudspeaker according to the loudspeaker's side or rear placement, as shown in **Figure 8**. Here are some tips on usage:

- *Use the DIPOLE setting on rear loudspeakers when listening to movies and classical music. The sound will be less focused as it is reflected along the room's boundaries. This is the best choice, since most films are mixed using non-localized surround effects, and classical music is usually recorded in a favorable acoustic environment.*
- *Use the BIPOLE setting on rear loudspeakers when listening to discrete multi-channel recordings that equally emphasize front and surround sounds.*
- *For multiple sets of StageFront FX loudspeakers, use the DIPOLE setting on the side loudspeakers (aimed at the listening position) for a more DIFFUSE surround effect. For the rear loudspeakers, use the BIPOLE setting to focus the sound.*
- *With the 1/8" (3.5 mm) trigger input for Bipole/Dipole mode switching, an IR macro can be used to control the loudspeaker mode. You can program this as part of your source selection. This is an easy way to have Dipole envelopment for Movie sources and Bipole performance for Music sources. (refer to page 5 for details)*

ACOUSTIC FINE TUNING

Each StageFront In-Wall FX loudspeaker features a Diffuse Sound Level control located on the front for acoustic fine-tuning after installation, as shown in **Figure 8**. Adjust this control as follows:

- *The Diffuse Sound Level control adjusts the level between the side-firing (diffuse) and front-firing drivers. Increase the level with this control for more ambiance. A decrease with this control will yield a more direct sound.*

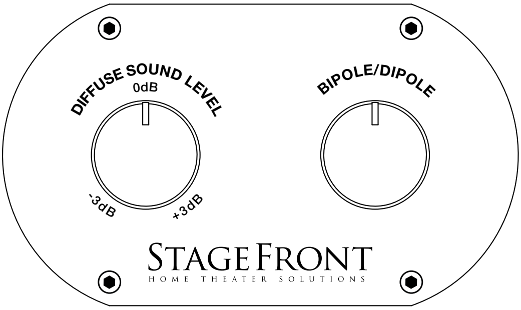

Figure 8. The In-Wall FX models feature BIPOLE/DIPOLE and Diffusion Level controls.

INSTALLING THE GRILLE

Starting at one corner, carefully align the magnetic grille into the frame and slowly allow the magnets to attach. Work around the grille edge, ensuring that the grille stays within the frame. When properly installed, the edges of the grille will be flush in appearance with the frame.

LISTENING AT HIGHER VOLUMES

Achieving a reasonable volume of sound in a large room requires more amplifier power than it does in a small room. It is possible to turn the volume up so high that the amplifier runs out of power. This creates “clipping” distortion, which will make treble sound very harsh and unmusical. When you hear harsh-sounding treble from any good loudspeaker, turn the volume down immediately! Those harsh sounds are masking much more powerful ultra-high-frequency sound spikes, which will quickly damage any fine loudspeaker. You are much less likely to damage a loudspeaker driven by a large amplifier because it will be very loud before any clipping distortion is produced.

CLEANING

Clean the StageFront Home Theater Solutions loudspeaker with a dampened soft cloth or paper towel. If the loudspeaker is mounted high up on a wall or ceiling, use a broom to gently brush it off.

SPECIFICATIONS

IW650FX

Recommended Amplifier Power

15 to 125 watts per channel

Nominal Impedance

6 ohm nominal; 3.2 ohm minimum

Frequency Response

80Hz to 20kHz, +/- 3 dB

Sensitivity

88 dB with 2.83 V pink noise input measured at 1 meter on axis

Frame Dimensions

21-1/2" x 11"

Hole Cut-Out Dimensions

19-7/8" x 9-3/8"
Depth From Front of Wall 3-7/8"

Wiring Requirements

We recommend using 16-gauge loudspeaker wire for runs up to 80 feet and 14-gauge loudspeaker wire for runs up to 200 feet. The connectors will accommodate up to 12-gauge wire.

IW770FX

Recommended Amplifier Power

15 to 125 watts per channel

Nominal Impedance

6 ohm nominal; 3.2 ohm minimum

Frequency Response

70Hz to 20kHz, +/- 3 dB

Sensitivity

90 dB with 2.83 V pink noise input measured at 1 meter on axis

Frame Dimensions

25-3/4" x 12"

Hole Cut-Out Dimensions

24-1/4" x 10-1/2"
Depth From Front of Wall 3-7/8"

Wiring Requirements

We recommend using 16-gauge loudspeaker wire for runs up to 80 feet and 14-gauge loudspeaker wire for runs up to 200 feet. The connectors will accommodate up to 12-gauge wire.

NOTES

NOTES

LIMITED WARRANTY

NILES AUDIO CORPORATION ("NILES") WARRANTS ITS PASSIVE LOUDSPEAKER PRODUCTS (THOSE NOT REQUIRING AC OR BATTERY POWER) TO THE ORIGINAL PURCHASER TO BE FREE OF MANUFACTURING DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF FIVE YEARS FROM DATE OF PURCHASE.

THIS WARRANTY IS SUBJECT TO THE FOLLOWING ADDITIONAL CONDITIONS AND LIMITATIONS. THE WARRANTY IS VOID AND INAPPLICABLE IF NILES DEEMS THAT THE PRODUCT HAS BEEN USED OR HANDLED OTHER THAN IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED BY THE MANUFACTURER, INCLUDING BUT NOT LIMITED TO DAMAGE CAUSED BY ACCIDENT, MISHANDLING, IMPROPER INSTALLATION, ABUSE, NEGLIGENCE, OR NORMAL WEAR AND TEAR, OR ANY DEFECT CAUSED BY REPAIR TO THE PRODUCT BY ANYONE OTHER THAN NILES OR AN AUTHORIZED NILES DEALER.

TO OBTAIN WARRANTY SERVICE, TAKE THE UNIT TO THE NEAREST AUTHORIZED NILES DEALER, WHO WILL TEST THE PRODUCT AND IF NECESSARY, FORWARD IT TO NILES FOR SERVICE. IF THERE ARE NO AUTHORIZED NILES DEALERS IN YOUR AREA, YOU MUST WRITE TO NILES AND INCLUDE YOUR NAME, MODEL AND SERIAL NUMBER OF YOUR UNIT, ALONG WITH A BRIEF DESCRIPTION OF THE PROBLEM. A FACTORY RETURN AUTHORIZATION NUMBER WILL BE SENT TO YOU. DO NOT RETURN ANY UNIT WITHOUT FIRST RECEIVING WRITTEN AUTHORIZATION AND SHIPPING INSTRUCTIONS FROM NILES.

IF THE ABOVE CONDITIONS ARE MET, THE PURCHASER'S SOLE REMEDY SHALL BE TO RETURN THE PRODUCT TO NILES, IN WHICH CASE NILES WILL REPAIR OR REPLACE, AT ITS SOLE OPTION, THE DEFECTIVE PRODUCT WITHOUT CHARGE FOR PARTS OR LABOR. NILES WILL RETURN A UNIT REPAIRED OR REPLACED UNDER WARRANTY BY SHIPPING SAME BY ITS USUAL SHIPPING METHOD FROM THE FACTORY (ONLY) AT ITS EXPENSE WITHIN THE UNITED STATES OF AMERICA. THERE ARE NO OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION, EITHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE PRODUCT.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER/PURCHASER. NILES SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES EXCEPT TO THE EXTENT PROVIDED (OR PROHIBITED) BY APPLICABLE LAW.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

FOR THE NAME OF YOUR NEAREST AUTHORIZED NILES DEALER CONTACT:
NILES AUDIO CORPORATION, P.O. BOX 160818, MIAMI, FLORIDA 33116-0818.

Please fill in your product information and retain for your records.

Model____________________ Serial No.__________________ Purchase Date_________

DETACH HERE AND RETURN TO: NILES AUDIO CORPORATION WARRANTY REGISTRATION DEPT. P.O. BOX 160818 MIAMI, FLORIDA 33116-0818

WARRANTY REGISTRATION CARD

Model Purchased ____________________

Serial Number ____________________

Date Purchased (month/day/year) ____________________

Dealer Name and Location ____________________

____

○ Dr. ○ Miss ○ Mr. ○ Mrs. ○ Ms.

Name ____________________

Address ____________________

____

City ____________________ State ____________ Zip ________

Telephone (   ) ____________________ email ____________________

Please take a moment to fill out our warranty registration card. The information helps us to get to know you better and develop the products you want

Age:
- ○ *Under 25*
- ○ *25-34*
- ○ *35-44*
- ○ *45-54*
- ○ *55 & over*

Income:
- ○ *Under $44,999*
- ○ *$45,000-$59,999*
- ○ *$60,000-$74,999*
- ○ *$75,000-$99,999*
- ○ *$99,999-$150,000*
- ○ *$150,000-$99,999*
- ○ *$99,999-$200,000*
- ○ *Over $200,000*

Occupation:
- ○ *Arts/Entertainment*
- ○ *Business Owner*
- ○ *Engineer*
- ○ *Finance/Accounting*
- ○ *General Office*
- ○ *Management*
- ○ *Professional*
- ○ *Sales/Marketing*
- ○ *Student*
- ○ *Tradesperson*

Musical tastes: (Please check all that apply)
- ○ *Alternative*
- ○ *Classical*
- ○ *Country*
- ○ *Jazz*
- ○ *New Age*
- ○ *Popular*
- ○ *R&B*
- ○ *Rock*
- ○ *Other* ____________

How did you hear about Niles?
- ○ *Architect/Developer*
- ○ *Custom Installer*
- ○ *Direct Mail*
- ○ *Friend/Family*
- ○ *In-Store Display*
- ○ *Interior Designer*
- ○ *Magazine Ad*
- ○ *Mail-Order Catalog*
- ○ *Newspaper Ad*
- ○ *Product Brochure*
- ○ *Product Review*
- ○ *Retail Salesperson*
- ○ *Internets*
- ○ *Other*

What magazines do you read?

1. ____________

2. ____________

3. ____________

Who will install the product?
- ○ *Custom Installer*
- ○ *Electrician*
- ○ *Friend*
- ○ *Myself*

Which factor(s) influenced the purchase of your Niles product? (Please check all that apply)
- ○ *Ease of Use*
- ○ *Price/Value*
- ○ *Product Features*
- ○ *Quality/Durability*
- ○ *Reputation*
- ○ *Style/Appearance*
- ○ *Warranty*

Do you . . . ?
- ○ *Own a House. If yes, how many square feet?*

____

- ○ *Own a Town House/ Condominium/Co-op*
- ○ *Rent an Apartment*
- ○ *Rent a House*

Are you interested in receiving literature on other Niles products?

○ *Yes* ○ *No*

Are there products/ capabilities that you would like to see introduced?

____

____

____

____

ENGINEERED BY NILES®

NILES AUDIO CORPORATION

12331 SW 130 Street, Miami, FL 33186 **1-800-BUY-HIFI** – www.nilesaudio.com

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